

IN THE UNITED STATES PATENT OFFICE

Application of: PAQUETTE, Denis

Docket No.: 6461-04

Application Number: 10/554,210

Filed: October 24, 2005 (from PCT application No. PCT/CA2004/000650, filed April 30, 2004)

Title: **SAFETY RESTRAINT SYSTEM**

Examiner: C. L. Bradford

Group Art Unit: 3634

Commissioner for Patents
Alexandria, Virginia 22313-1450

April 14, 2011

Sir:

RESPONSE TO OFFICIAL ACTION

In response to the Official Action of October 14, 2010, which Action was made FINAL, the Applicant respectfully submits: (i) an amended set of claims; and (ii) remarks and comments made in response to the Examiner's rejections.

The Applicant also respectfully requests a three month extension of time in which to respond to the Action. Payment of the requisite fees is being submitted herewith.

Further, a request for continued examination (RCE) accompanies the present submission. Payment of the requisite fee for the RCE is also being submitted herewith.

Amendments to the claims

This listing of claims will replace all prior versions, and listings of claims, of record in the present application.

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)
4. (Cancelled)
5. (Currently Amended) A safety restraint device as claimed in Claim ~~[4]~~ 17 wherein said locking mechanism is a ratchet assembly.
6. (Currently Amended) A safety restraint device as claimed in Claim 17 wherein said winch assembly ~~{said accessory}~~ comprises 2 or 3 winches ~~{winch assemblies}~~.
7. (Currently Amended) A safety restraint device as claimed in Claim 17 additionally comprising a second ~~{two}~~ releasable mounting device ~~{devices}~~ for additionally receiving and attaching at least one accessory ~~{of a variety of accessories}~~ to said base rod.
8. (Currently Amended) A safety restraint device as claimed in Claim ~~[17]~~ 7 wherein said additional accessory is attached to said safety restraint device using said second mounting device and which accessory is selected from the group consisting of ~~{a winch assembly,}~~ a ladder, a light, a sign, a radio, ~~{a handrail,}~~ a platform, [or] and a suspended platform.
9. (Cancelled)

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Previously Amended) A process as claimed in Claim 18 wherein said base rods are attached to said vertical frame members before installation of said vertical frame members into a vertical position.

16. (Cancelled)

17. (Currently Amended) A safety restraint device for use in combination with a series of similar safety restraint devices, wherein each safety restraint device comprises:

a base rod having a fixed C-shaped or V-shaped attachment bracket attached to said base rod, a threaded locking rod which is essentially parallel to said base rod, and which is operatively connected to a moveable C-shaped or V-shaped attachment bracket, and a crank connected to one end of said locking rod, so that turning of the crank results in relative movement of said moveable attachment bracket towards, or away from, said fixed attachment bracket, and thereby grasp or release an I-beam frame member within said C-shaped or V-shaped attachment brackets and thus, temporarily affix said base rod to a frame member;

at least one opening in said base rod acting as a first mounting device, for receiving and releaseably attaching a winch assembly comprising:

a winch;

a static line, consisting of a safety cable, which is operatively connected to the winch so that said winch can be operated in order to vary the length of said safety cable;

a locking mechanism on said winch so that the static line can be maintained in a tightened condition, at a selected length; and

a mounting attachment for attaching said winch accessory to said releasable mounting device, and

~~[and at least one of a variety of accessories to said base rod, wherein said accessories are removable, interchangeable devices which can be added or removed from said first mounting device, and which accessory is attached to said first mounting device using a lock pin;]~~

at least one attachment clip attached to said ~~[base rod]~~ safety restraint device and to which ~~[a rope or]~~ a safety cable from an adjacent safety restraint device can be connected in order to establish a static line, and then drawn tight using said winch~~]; and~~

~~—— a plurality of accessories each having a second mounting device adapted to be inserted into said opening of said first mounting attachment device, wherein said accessories are removable, interchangeable devices which can be added or removed from the first mounting device].~~

18. (Currently Amended) A process for establishing a static line for a safety restraint system in a framing situation comprising:

separately attaching a first safety restraint device as claimed in Claim 17 to a first vertical frame member, and attaching a second safety restraint device as claimed in Claim 17 to a second vertical frame member by temporarily affixing said base rods of each safety restraint devices to said vertical frame members by cranking said crank and thus attaching said safety restraint devices to said frame members by using said C-shaped or V-shaped attachment brackets;

mounting a winch assembly ~~[having a mounting attachment for attaching said winch assembly]~~ to said opening of said first and said second safety restraint devices ~~[device accessory to said opening of said first mounting attachment of said first safety restraint device]~~, which each winch assembly comprises a winch, a winch locking device, and a static line operatively connected to said winch, ~~wherein said static line, consists of a safety cable, which is operatively connected to the winch;~~

using said winch to extend ~~[extending]~~ said static line from said winch assembly;

~~[-and]~~ connecting said static line from said first safety restraint device to the attachment

clip on said second safety restraint device;~~[-, and]~~

turning said winch on said first safety restraint device to vary the length of said safety cable, and thus tighten said static line between said first and second safety restraint devices; and

locking said static line in said tighten state, using said winch locking device, and thereby establish a static line between said first and second safety restraint devices.

19. (New) A safety restraint device as claimed in Claim 17 wherein said winch assembly is removable from said mounting attachment, and can be replaced with an accessory attached to said mounting device, and wherein said accessory is selected from the group consisting of a ladder, a light, a sign, a radio, a platform, and a suspended platform.

Request for an Extension of Time

The Applicant requests a three month extension of time under the provisions of 37 CFR 1.136(a), in which to respond to the Office Action. Payment of the appropriate fee in respect of a small entity, is included with this submission.

I confirm that I am the Agent of Record for this application.

Request for Continued Examination (RCE)

The Applicant submits herewith, a Request for Continued Examiner (RCE), together with the Applicant's amendments and comments in respect of the FINAL Office Action. Payment of the appropriate fee in respect of a small entity, is also included with this submission.

Remarks:

Claim Status

Claims 3 to 8, 12, 13, 15, 17 and 18 currently stand of record in the present application. All claims currently stand as being rejected, under 35 USC 102 and/or 35 USC 103. The Applicant respectfully traverses these rejections.

However, in order to clarify the nature of the invention, Claims 17 and 18 have been amended to clarify and limit the scope of the present set of claims. Additionally, Claims 3, 4, 12, and 13, have now been cancelled. New claim 19 has been added, and is directed to the use of replacement accessories. Basis for this claim can be found on page 5, line 30 *et seq.*

As such, Claims 5 to 8, 15, 17, 18 and 19 are now pending in the present application.

In more detail, main Claims 17 and 18 have been amended to indicate that the length of the cable between the base units can be adjusted using the winch assembly. Basis for this amendment can be found on page 6, line 19, of the application as originally filed. As such, this amendment is supported by the application as originally filed, and does not introduce any new subject matter.

Further, it is clarified that each device is the same so that the user need not maintain or use a variety of different devices in which to establish a safety line between devices.

In view of these amendments, and the comments provided hereinbelow, the Applicant submits that the rejections of the claims should now be withdrawn.

Claim Objections

The Examiner has objected to Claims 3, 6, 8 and 13 on the basis that there is insufficient antecedent basis for the term “accessory” in Claim 17. In response, the claims have been amended to provide proper antecedent for any or all of the accessories. With these amendments, the Applicant submits that this objection to these claims has now been obviated.

Rejection Under 35 USC 102

Claim 17 stands rejected under 35 USC 102(b), as being anticipated by US Patent No. 6173809 (hereinafter “Cole”). The Applicant respectfully traverses this rejection.

Cole provides a safety restraint system which is fitted to a horizontal I-beam, and which has a vertical stanchion fitted each base member. The stanchions are provided with two bolt “bores” (24a and 24b) through which a clevis pin (20a and 20b) can be inserted in order to attach cables to the stanchions. The cable runs to corresponding positions on adjacent stanchions.

The cable length is fixed between stanchions, and thus, Cole cannot adjust the distance between stanchions without modification of the cables that run between stanchions.

As such, Cole merely provides a single use device, common to the prior art, which can be used to hold one or two custom length cables that have to be cut and fitted to the individual distances between the two or more stanchions.

Cole does mention the possibility of using a different cap, such as a “pass-through” type cap (Col. 5, line 48), but Cole clearly indicates that the cap is to be “firmly secured to the upper terminus of the post” (Col. 3, line 28), and preferably “welded” to the post (Col. 11, line 31). As such, Cole does not provide, and in fact, teaches away from the provision of a removable, interchangeable device, mounted to the device using a second mounting device.

The only mention of providing a replacement cap, by Cole, would therefore require a different cap to be welded onto the post. Clearly changing from one cap to another would not be practical, nor rapid. Cole would therefore likely need to supply at least two different types of stanchions, that must be stored by the user.

The device of the present system as currently claimed, includes a winch assembly with cable, and attachment clips, so that the length of cable between devices can be easily adjusted. In view of this amendment, the Applicant submits that Claim 17 is clearly not anticipated by Cole,

and therefore, the rejection of Claim 17 under 35 USC 102(b), as amended herein, should now therefore be withdrawn.

With respect to the rejection of Claim 7, the Examiner comments that Cole provides two releasable mounting devices 18a and 18b. However, these two devices are merely clevises that are only adapted to hold cables. There is nothing to suggest that Cole's device could include anything else other than a clevises used to hold a cable. In any case, main Claim 17 requires a winch assembly, and no winch assembly is included in the Cole design.

With respect to the rejection of Claim 8, this objection has been obviated since a winch assembly is required in the main claim of the presently amended set of claims. Since Cole does not include a winch assembly, Claim 8 cannot be anticipated by Cole.

Similarly, with respect to Claim 12, since Cole is totally silent as to the use of his device with a winch assembly (as required in the main claim), Claim 12 cannot be anticipated by Cole.

As such, in view of these comments, the Applicant submits that the rejections of Claims 7, 8 and 12, under 35 USC 102(b) should now also be withdrawn.

Rejection Under 35 USC 103

Claims 3, 4, 5, 6, 13, 15 and 18, all stand rejected under 35 USC 103(a) as being obvious over Cole in view of US Patent No. 6036146 (hereinafter "Paterson"). The Applicant also respectfully traverses this rejection.

The Applicant notes that the device described by Cole does not include a winch assembly. However, it is noted that Paterson describes a safety cable system which includes a winch assembly for feeding out cable as required. However, Paterson uses a specific type of stanchion "20" which includes a tube "23" for holding the winch assembly. This is the only utility that Paterson describes for tube "23". Nothing else is mentioned as being suitable for being held within tube 23. Moreover, tube 23, and stanchion 20 are the only base units which are indicated as being suitable for holding the winch assembly.

Further, Paterson is silent as to any other use of tube 23 or stanchion 20.

Thus, in the Paterson approach, the winch assembly must be used on a different type of stanchion than his end stanchions. As a result, when Paterson extends the cable from reel 37, he must connect the cable end to a second and different type of stanchion unit, namely an end stanchion unit "70". This is after it has optionally passed through a third type of stanchion, namely an intermediate stanchion "50". As such, Paterson would typically require at least two, and possibly three different types of stanchions. Paterson is totally silent about the possibility of using one common stanchion, or device, for a wide variety of applications.

In contrast, the device of the present invention acts as both a winch assembly, and as an attachment point for the cable from an adjacent device. As such, the user of the present system need only maintain a supply of one type of device. Moreover, because of the winch assembly on the present invention, the distances between devices can be easily adjusted.

This provides improved efficiency, and flexibility, over the prior art designs, in that only one type of product is required. The user does not need to stock a variety of different stanchions.

Further, the present device has improved functionality over the prior art devices since each device operates in exactly the same fashion as its adjacent device, and, the operator need not be concerned with whether a proper layout has been established for each of the three types of stanchions used by Paterson, or whether the proper distance between the stanchions of Cole had been provided.

At best a combination of Cole and Paterson would lead the skilled artisan to use the winch assembly from Paterson on the stanchion of Cole. However, there is nothing to suggest to the skilled artisan that a single stanchion (or device) could act to provide two separate functions, namely supplying cable, and additionally acting as an attachment point for cable from an adjacent device. This is a critical feature of the present device in that it can act as a multi-functional device. While Coles device might hold two cables, there is nothing to suggest that the Cole device can provide two different functions.

Further, Paterson is also silent as to providing a multi-functional device that can act both as the cable supply (e.g. with the winch), and as a cable attachment point. As such, a combination of Cole and Paterson would not lead the skilled artisan to the present invention.

With respect to the specific rejections of Claims 3 and 4, it is noted that Claims 3 and 4 have been cancelled, and therefore, the rejection of these claims has been obviated.

As to the rejection of Claim 5, since Claim 5 is dependent on allowable Claim 17, the Applicant submits that Claim 5 is also allowable.

With respect to the rejection of Claim 6, since Claim 6 is also dependent on allowable Claim 17, Claim 6 is also allowable.

As to the rejection of Claims 13, it is to be noted that this claim has been cancelled, and thus the rejection has been obviated.

With respect to the rejection of Claim 15, the Applicant acknowledges that other systems can be added to the frame members prior to installation of the frame members. However, in contrast to the present system, the Cole and Paterson devices are attached to the horizontal I-beams, where they can interfere with movement along the I-beam until the I-beam is locked into place. By being applied to the vertical members, the user can move along the horizontal member without interference. This is particularly important while the user is first establishing the safety cable restraint system.

In any case though, Claim 15 is dependent on allowable Claim 18 (as follows), and therefore is also allowable.

As to the rejection of Claim 18, it is noted that the claim is dependent on the use of the devices of Claim 17, which devices are patentable. As such, the process of using these devices is also allowable.

Further though, the process of this invention allows the user to merely safety restraint devices to the vertical members. These devices are identical, and at this stage, can be used to provide safety cables in a variety of directions. Only after the vertical member has been affixed to the building, does the user have to decide extend the cables to establish the safety cables.

In contrast, the Cole and Paterson systems require the user to plan the arrangement of the

various types of stanchions in advance so that the main, intermediate and end stanchions are all correctly positioned, or that the stanchions are correctly positioned for the cable lengths to be used. Moreover, if an error is made, or if the chosen arrangement is to be changed, the Cole and Paterson devices must be removed or moved on the horizontal members so that the proper stanchion, or cable length, can be placed into an appropriate position.

The Applicant's process avoids this necessity.

Accordingly, the Applicant contends that the rejection of Claims 15 and 18 should now also be withdrawn.

Finally, with respect to new Claim 19, the Applicant comments that the main significant advantage of the system and devices of the present invention is that it allows workers to have increased flexibility and safety during the construction process. The system is intended to be used primarily as a fall arrest system. However, once the steel work and flooring is installed, the next sequence of construction is to allow other trades such as electricians, pipefitters etc...to have safe access to the site in order to perform their work. At this time, the winch assemblies can be removed, and the base units can still be used as brackets so that more substantial handrails (and not just cables) can be easily deployed. This creates a safe perimeter which would allow workers to perform their tasks without the need for safety harness' or cable tethers.

Later, the base unit of the present invention can also be used for a wide range of construction related items. Such as for ladders, radios (speaker mounts), light mounts, temporary elevated walkways, temporary elevated platforms or work decks.

The prior art systems do not provide this type of flexibility, and therefore, the waste of custom building safety related items (such as make-shift handrails for example) at construction projects can be drastically reduced with the present system. As such, the Applicant submits that the devices of the present invention are both novel and inventive over the cited prior art.

Additional Art

The Applicant has also reviewed the additional prior art listed by the Examiner in the Action (but not specifically cited). The Applicant submits that none of US 6131698, 6053281 nor US 5522472, when considered together or alone, or in any combination with Paterson or Cole,

would be destructive of novelty or inventiveness of the present invention. As such, the Applicant submits that the present application is still allowable in view of this additional art.

Summary

The Applicant therefore contends that with this submission, a full and complete response to the Office Action has now been submitted. Further, the Applicant respectfully contends that the present application, as amended, is now allowable, and as such, respectfully solicits a Notice of Allowance at the earliest opportunity.

Respectfully submitted,
Gowan Intellectual Property

A handwritten signature in black ink, appearing to read 'G. A. Gowan', with a stylized flourish at the end.

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